Micronet
Faster and Easier Networks

User's Manual

24 + 2 Combo PoE Web Smart Switch

Model No.: SP6026P

http://www.micronet.info

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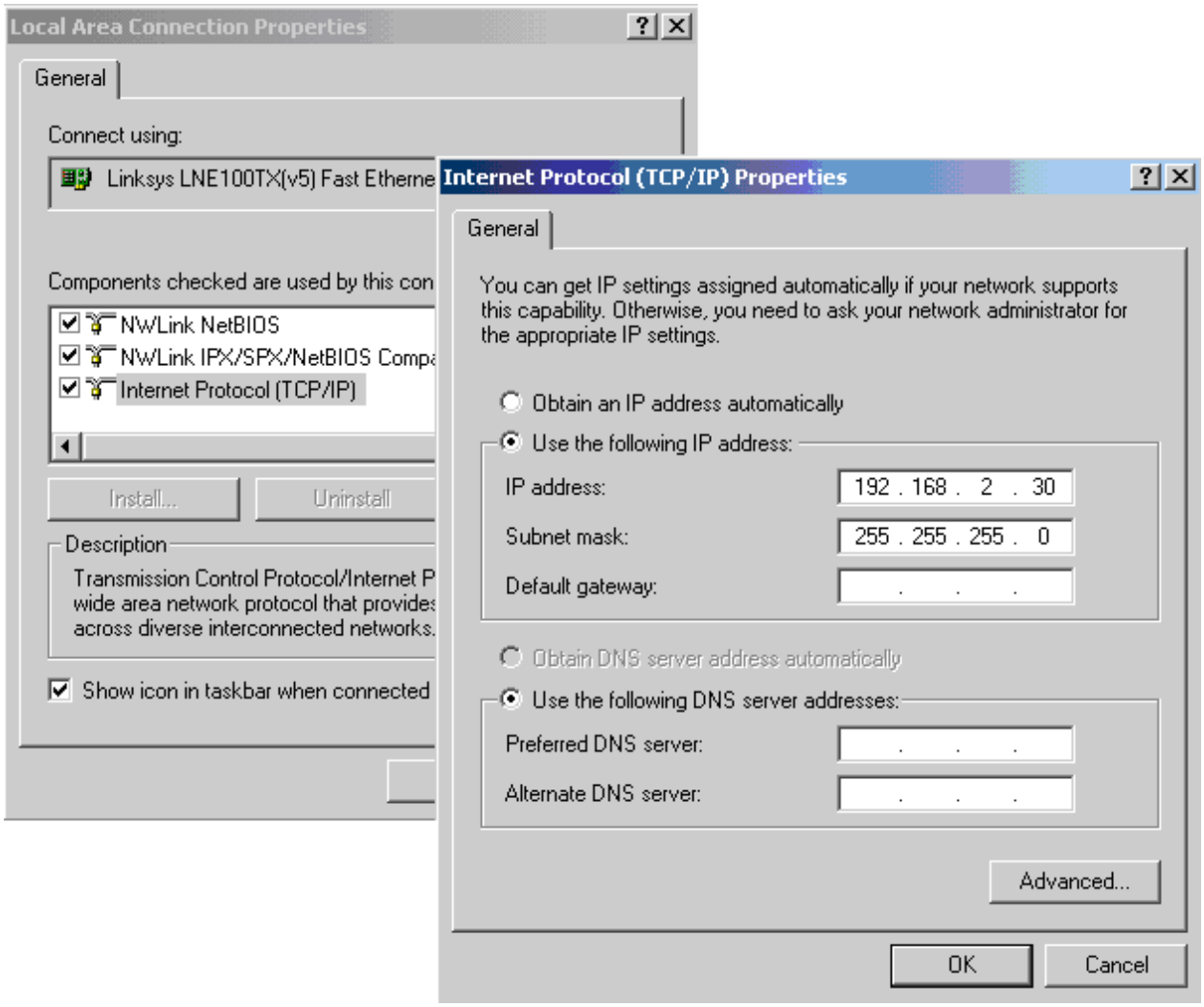
Web Smart Switch Configuration

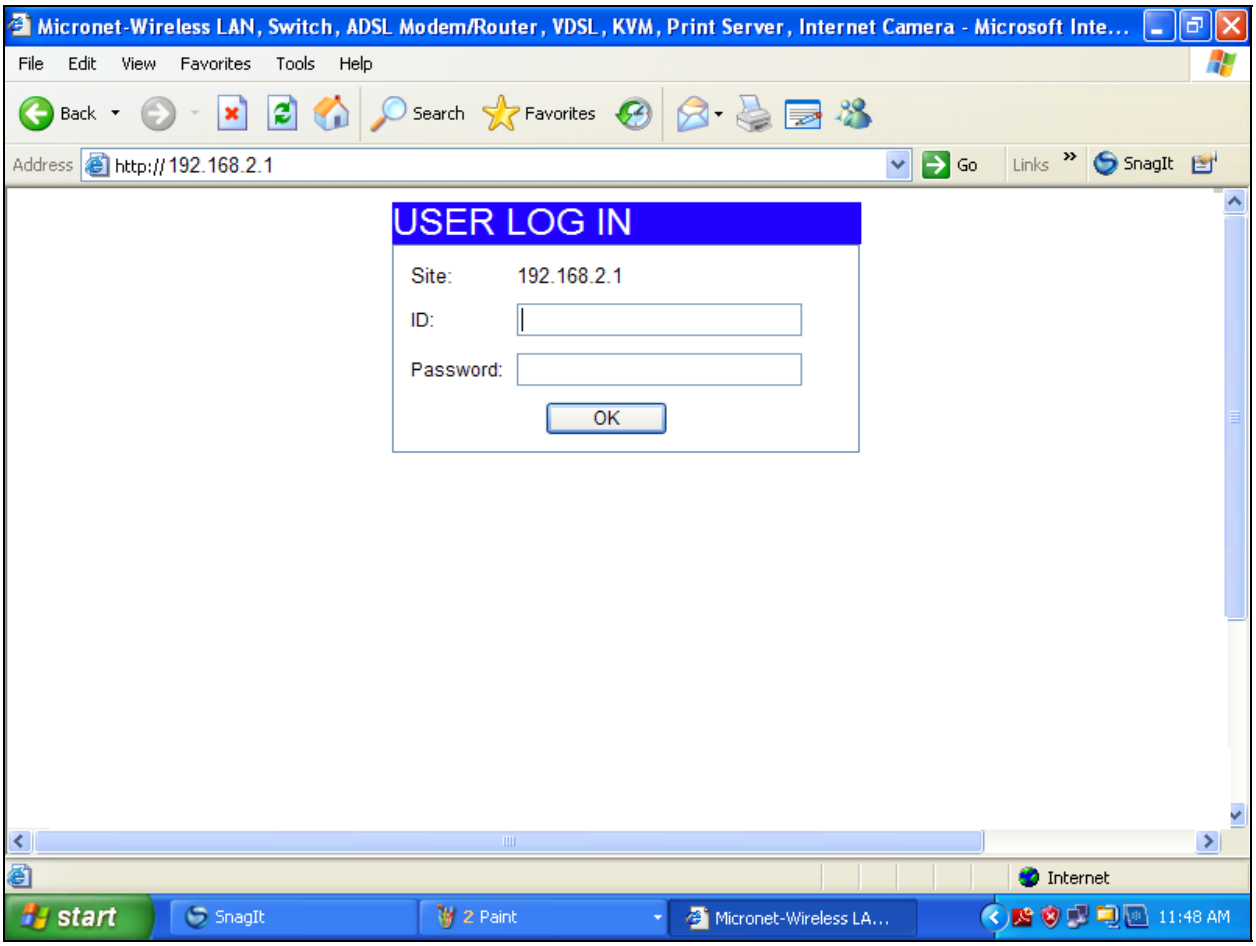
Please follow the steps to configure this Web Smart switch.

Step 1: Use a twisted pair cable to connect this switch to your PC.

Step 2: Set your PC's IP to 192.168.2.xx.


Local Area Connection Properties
General
Connect using:
Linksys LNE100TX(v5) Fast Etherne
Components checked are used by this con
NWLink NetBIOS
NWLink IPX/SPX/NetBIOS Compa
Internet Protocol (TCP/IP)
Install...
Uninstall
Description
Transmission Control Protocol/Internet P
wide area network protocol that provides
across diverse interconnected networks.
Show icon in taskbar when connected
Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 2 . 30
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

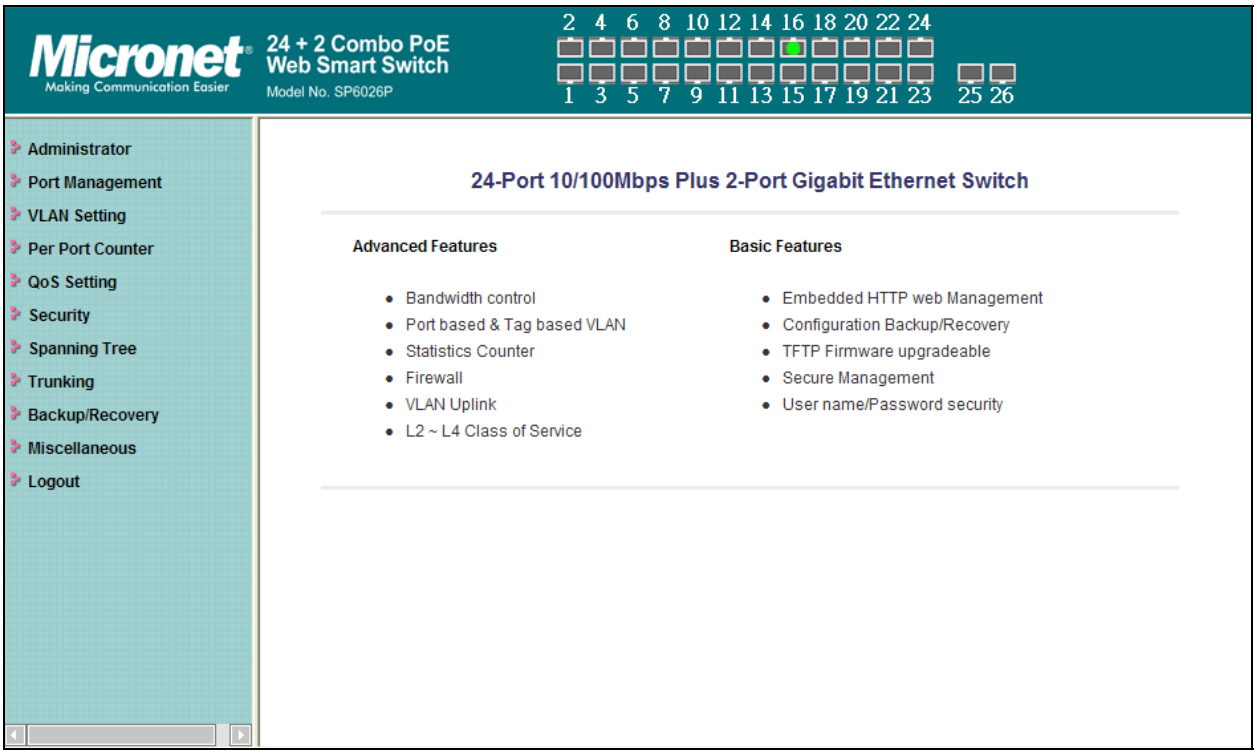
Step 3: Open the web browser (like IE…), and go to 192.168.2.1 Then you will see the login screen.



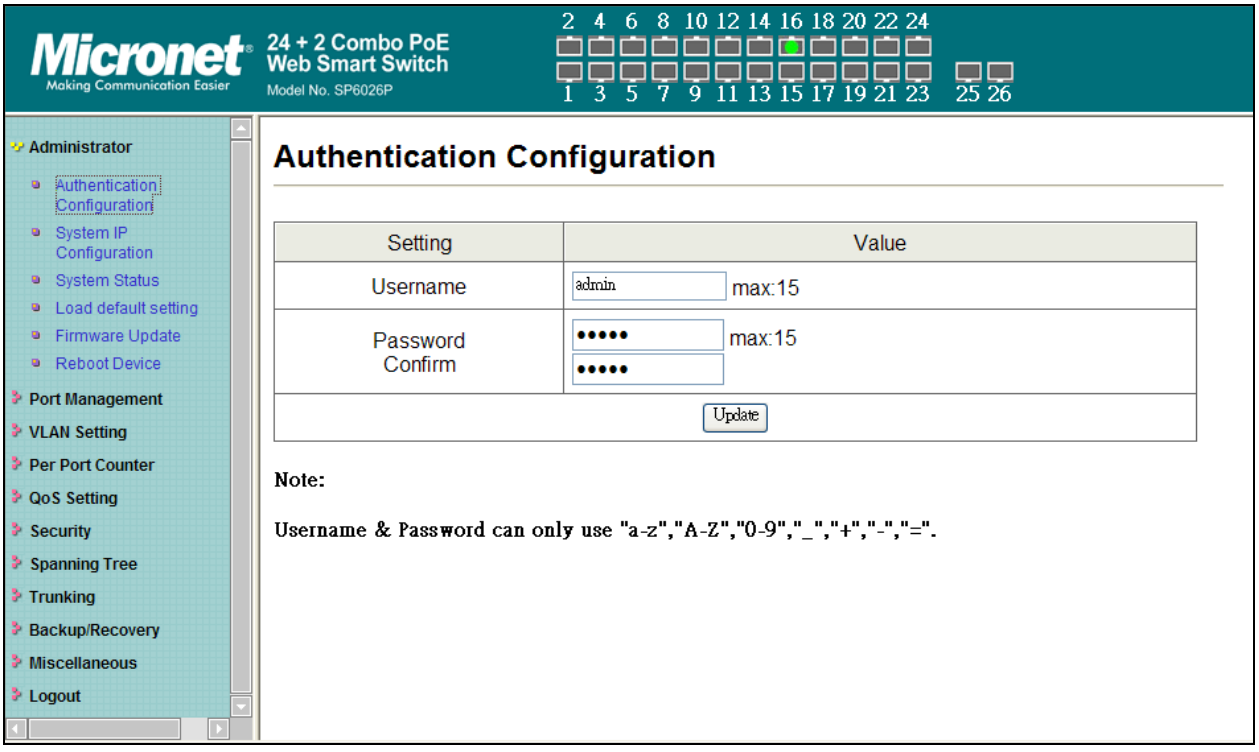
ID: admin
Password: 1234

Step 4: After the authentication procedure, the home page shows up. Select one of the configurations by clicking the icon.

- Administrator
- Port Management
- VLAN Setting
- Per Port Counter
- QoS Setting
- Security
- Spanning Tree
- Trunking
- Backup/Recovery
- Miscellaneous
- Logout



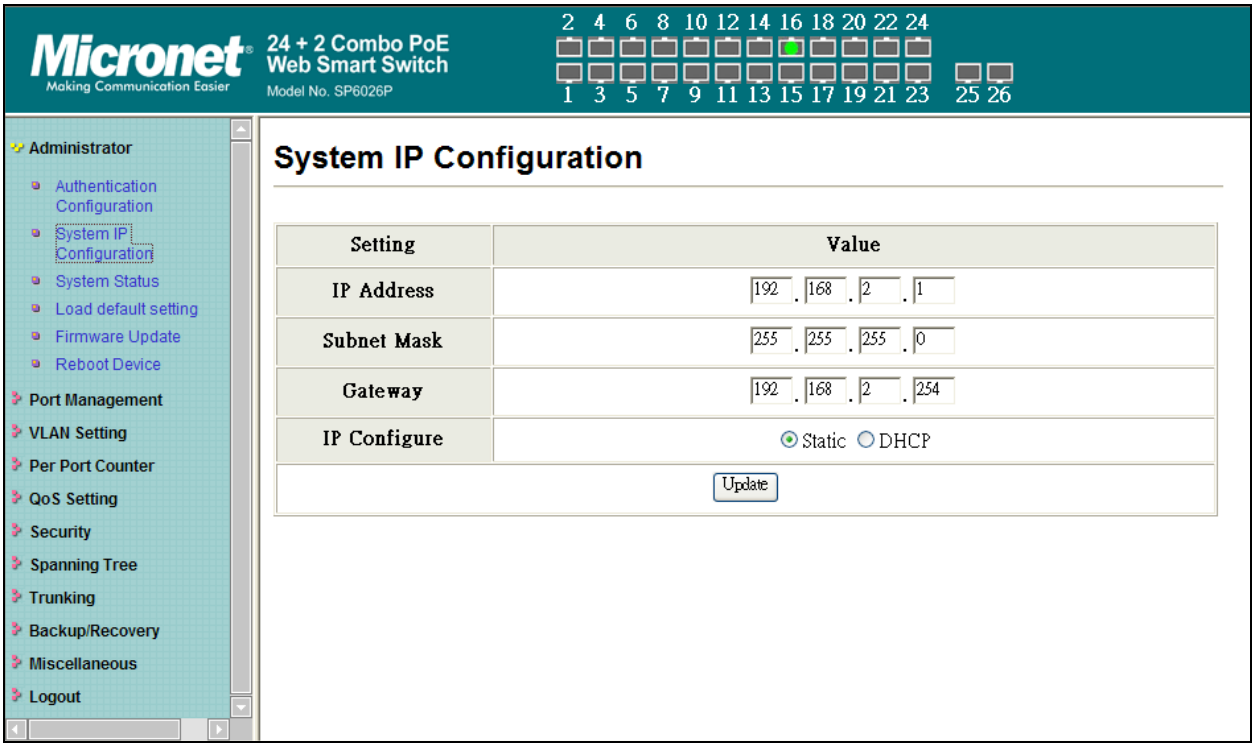
Administrator: Authentication Configuration



1. Change the user name and the password.
2. Click “Update” to confirm the new change.

Now, you can use the new user name and the password.

Administrator: System IP Configuration

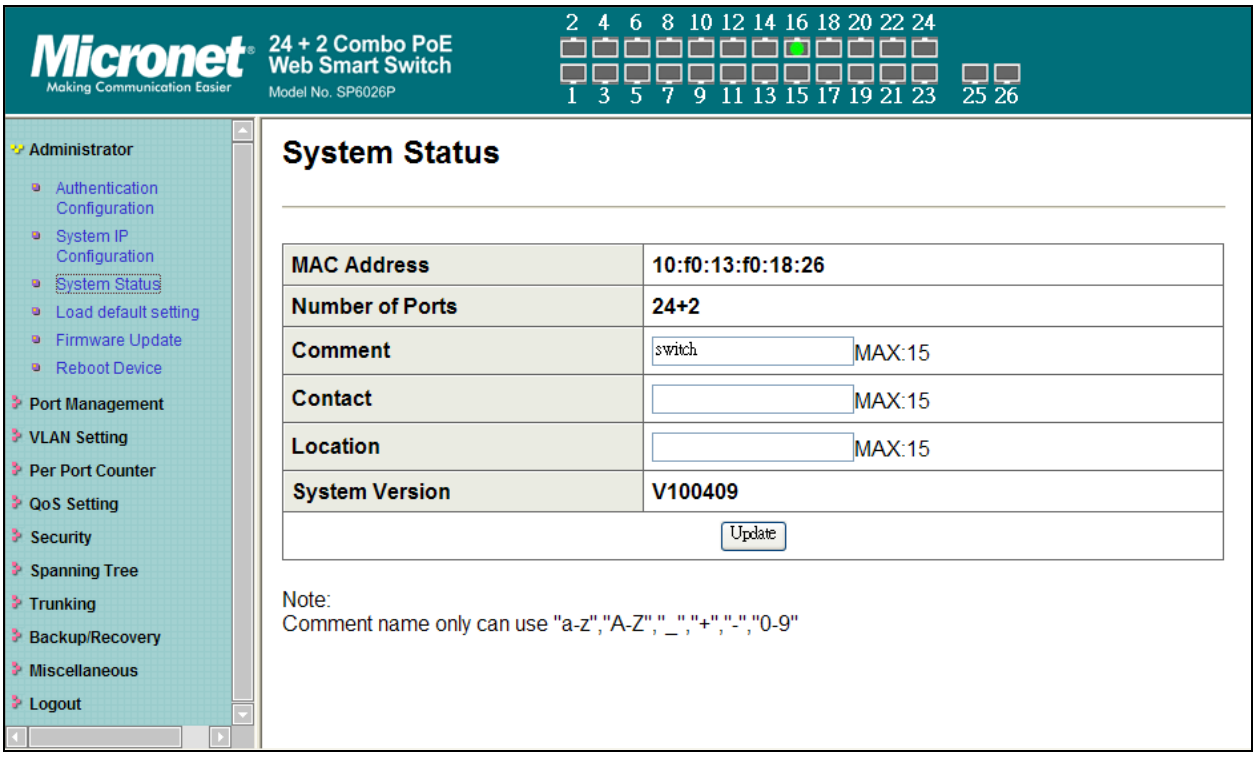


1. Change the IP address: type the new IP address or select DHCP IP configuration.

2. Click “Update” to confirm the new change. Setting Process OK!!” will be shown on the screen.

Now, the setting of “System IP Configuration” is finished.

Administrator: System Status



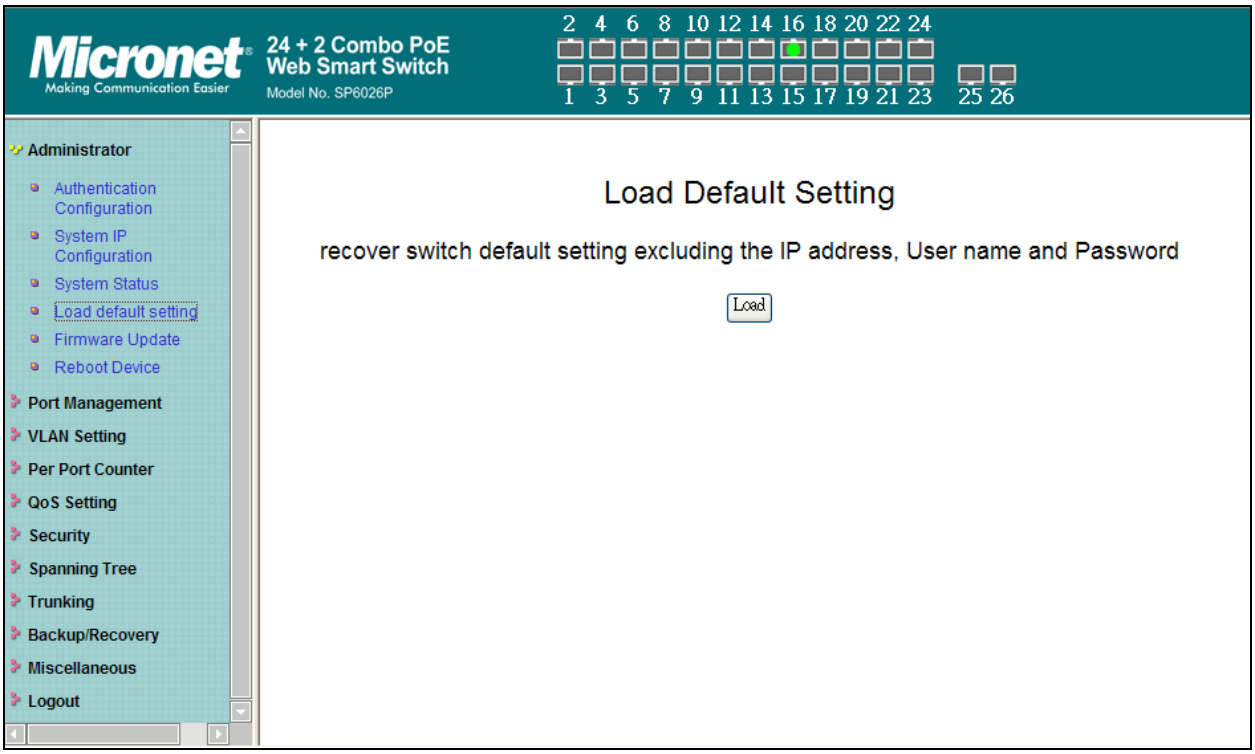
MAC address and system version will be shown on the screen.

1. Change the new comment of this switch by typing the new comment.

2. Click “Update” to confirm the new change.

Now, the setting of “System Status” is finished.

Administrator: Load Default Setting

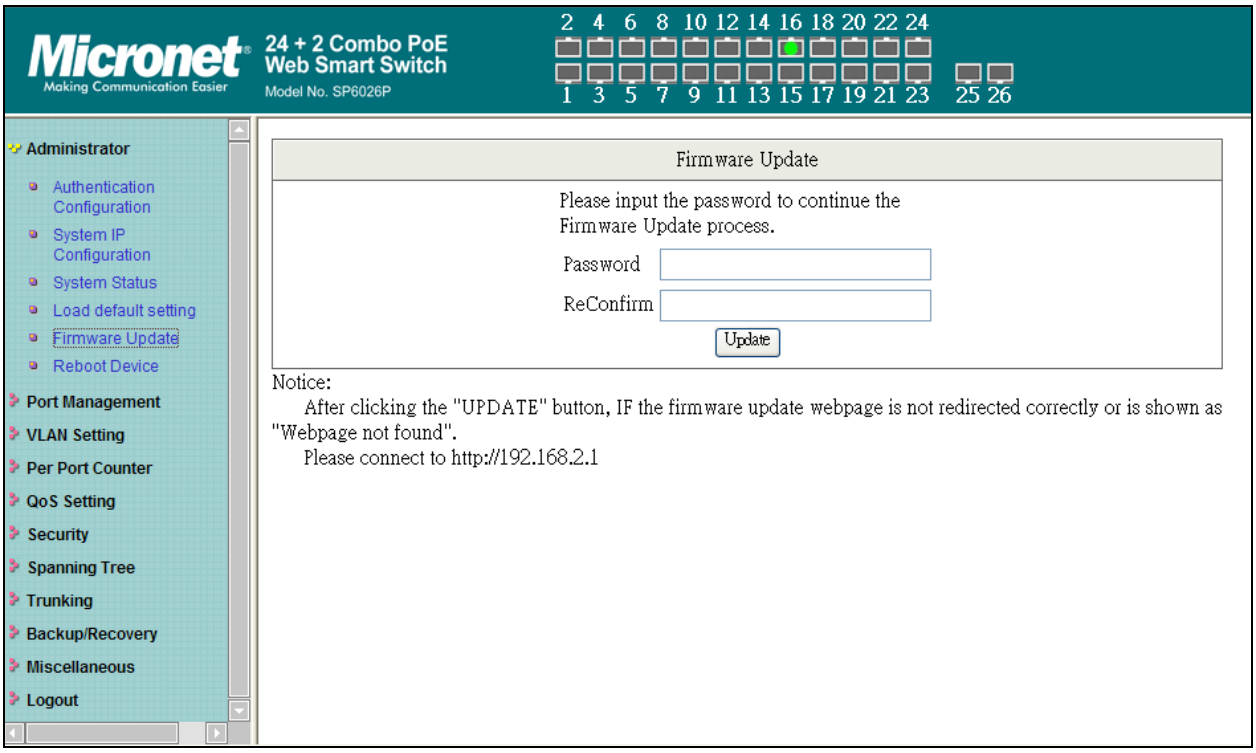


1. Click “Load” to back to the factory default setting.

**Note: Recover switch default setting excluding the IP address, User name and Password.

Now, the default is loaded.

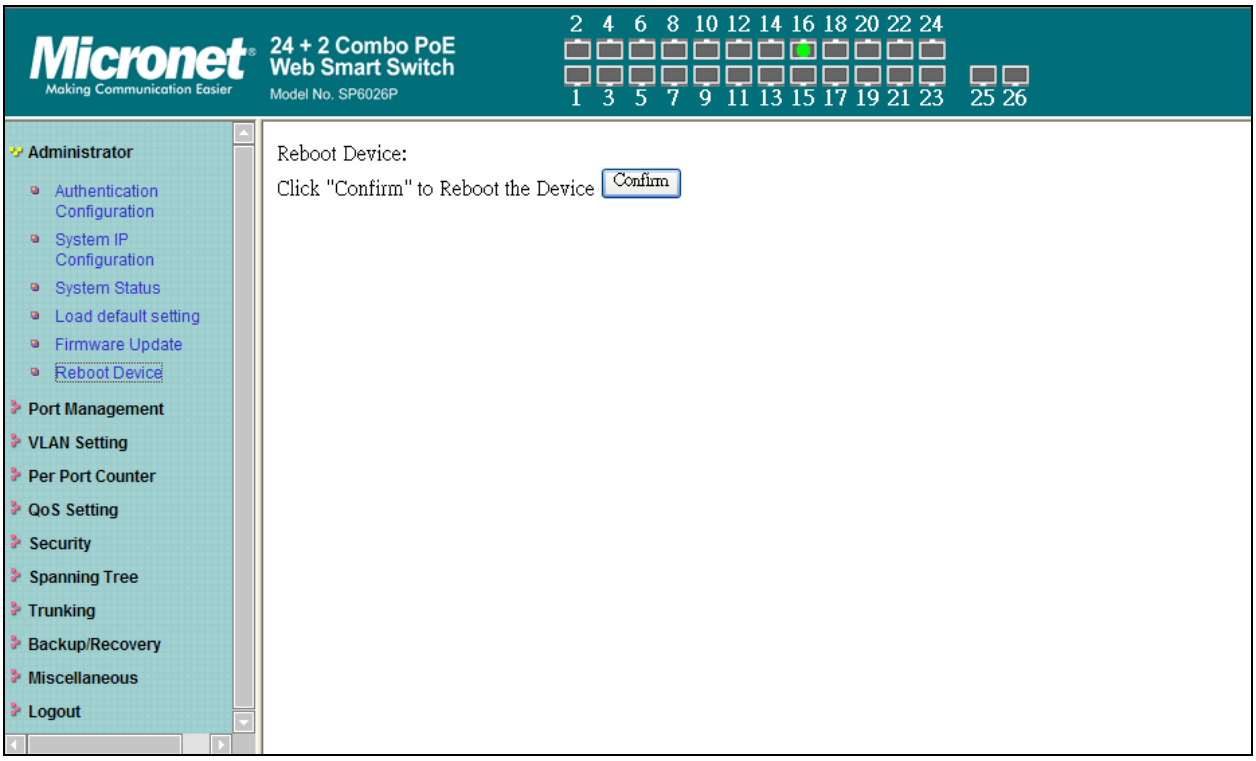
Administrator: Firmware Update



Follow the instruction on the screen to update the new firmware.

Please contact with your sales agents to get the latest firmware information.

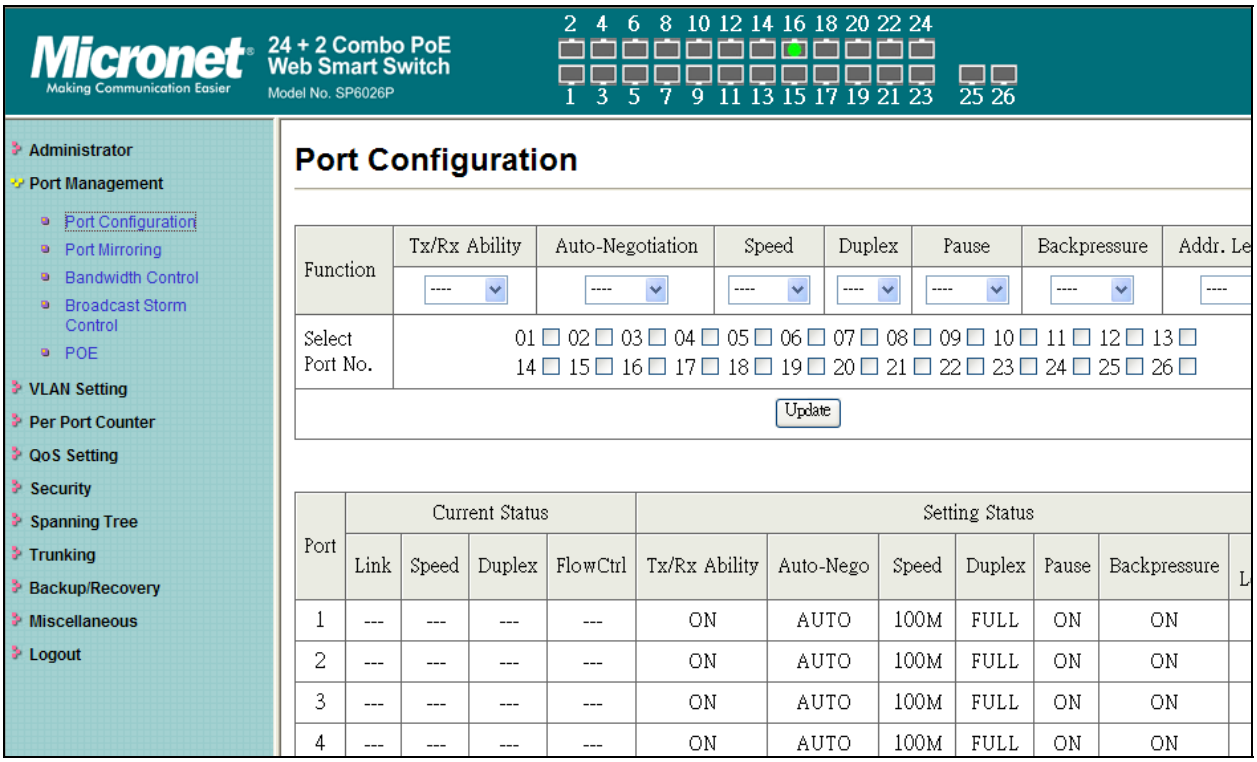
Administrator: Reboot Device



1. Click “Confirm” to reboot the device.

Now, the setting of “Reboot Device” is finished.

Port Management: Port Configuration

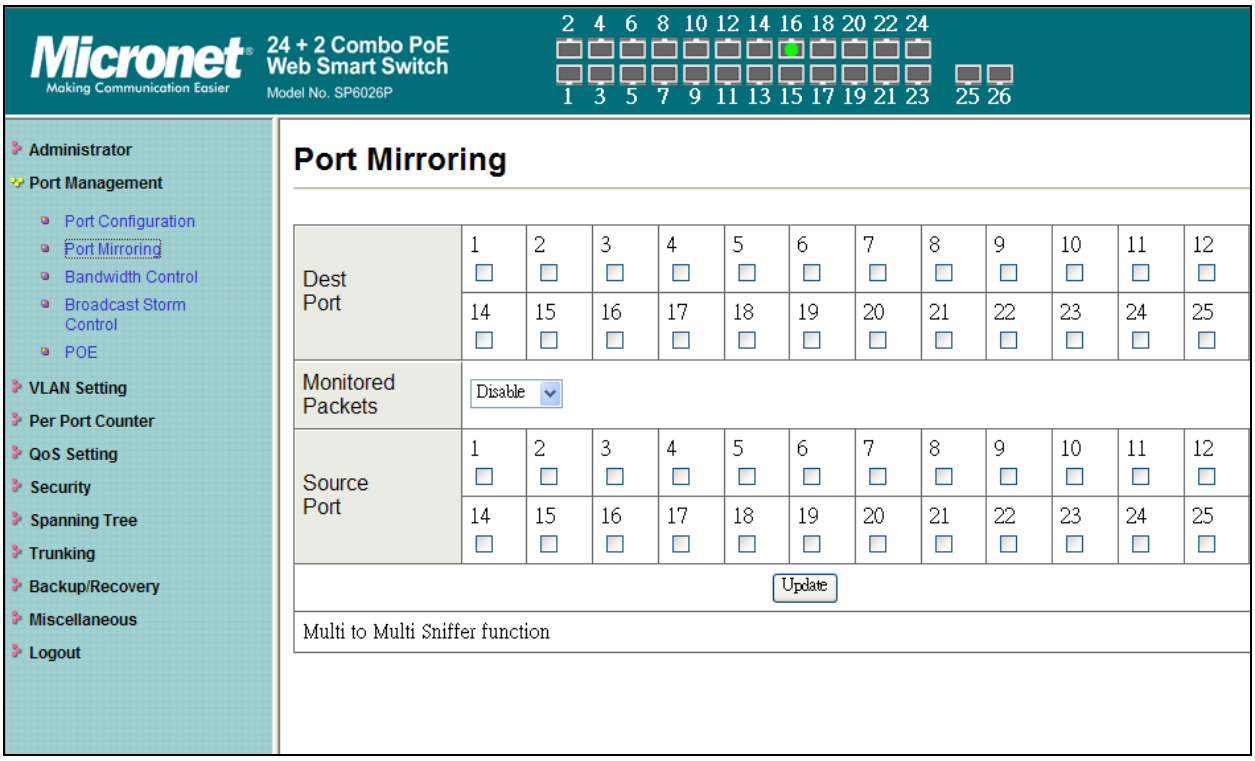


Select the “Port No.” - configure the mode below:

1. Tx Cap Ability- enable/disable for the selected port.
2. Auto-Negotiation- enable/disable Auto-Negotiation.
3. Speed - 10M, 100M or 1000M mode for the selected port.
4. Duplex - Full or Half-Duplex mode for the selected port.
5. Pause - enable/disable for the selected port.
6. Backpressure - enable/disable for the selected port.
7. Addr. Learning - enable/disable for the selected port.

After press the “Update”, the setting of “Port Configuration” is finished.

Port Management: Port Mirroring



Port Mirroring is used to mirror traffic, RX, TX or TX&RX, from Source port to Destination port for analysis.

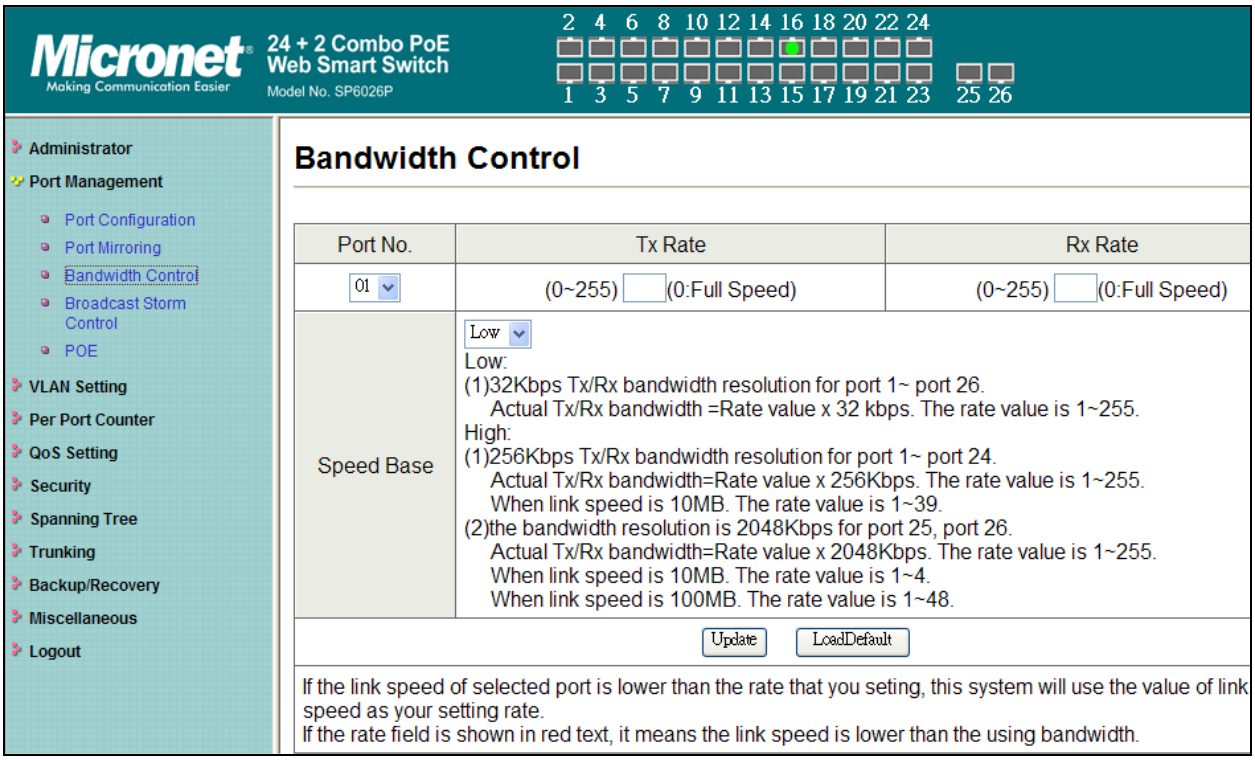
1. Select the Destination port: you can choose port 1 to port 26.

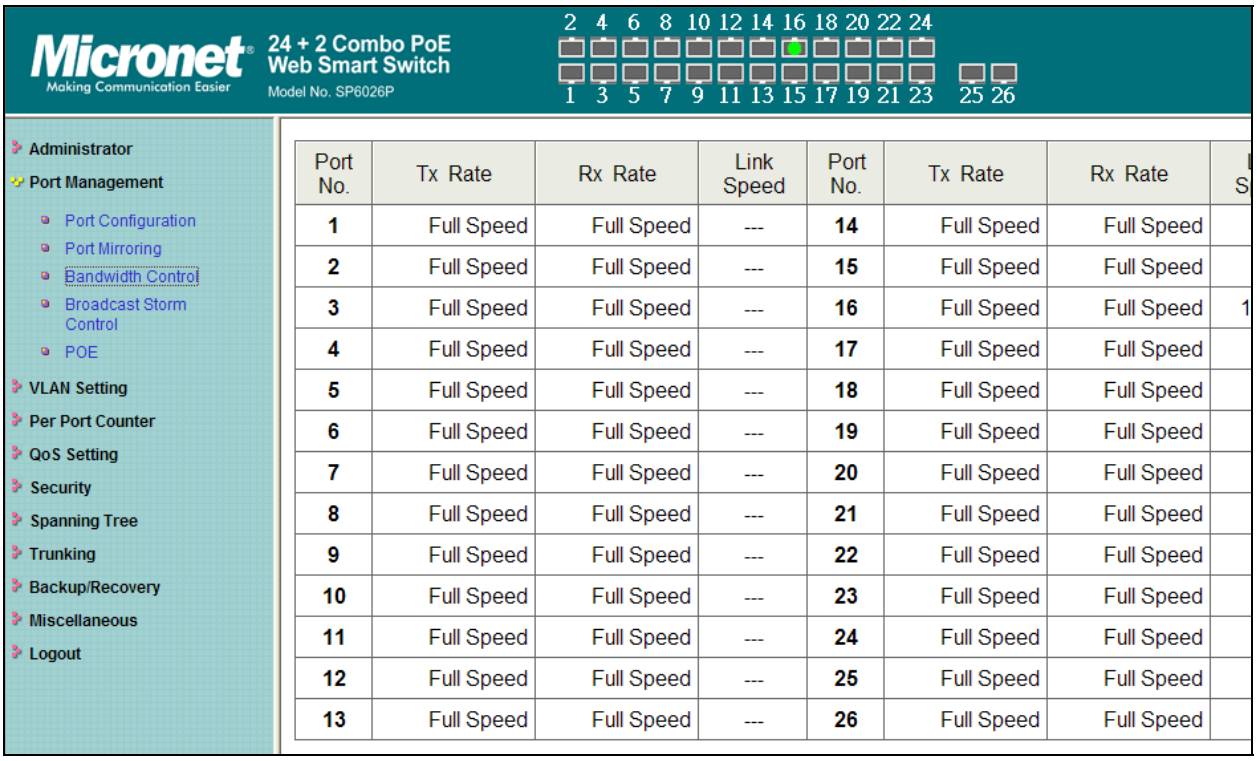
2. Select the Source port: by clicking the checking box of the port.

3. Click “Update” to save the setting.

Now, the setting of “Port Mirroring” is finished.

Port Management: Bandwidth Control


Micronet
Making Communication Easier
24 + 2 Combo PoE
Web Smart Switch
Model No. SP6026P
2 4 6 8 10 12 14 16 18 20 22 24
1 3 5 7 9 11 13 15 17 19 21 23 25 26
Administrator
Port Management
Port Configuration
Port Mirroring
Bandwidth Control
Broadcast Storm Control
POE
VLAN Setting
Per Port Counter
QoS Setting
Security
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
Bandwidth Control
Port No.
Tx Rate
Rx Rate
01
(0~255) (0:Full Speed)
(0~255) (0:Full Speed)
Speed Base
Low
Low:
(1)32Kbps Tx/Rx bandwidth resolution for port 1~ port 26.
Actual Tx/Rx bandwidth =Rate value x 32 kbps. The rate value is 1~255.
High:
(1)256Kbps Tx/Rx bandwidth resolution for port 1~ port 24.
Actual Tx/Rx bandwidth=Rate value x 256Kbps. The rate value is 1~255.
When link speed is 10MB. The rate value is 1~39.
(2)the bandwidth resolution is 2048Kbps for port 25, port 26.
Actual Tx/Rx bandwidth=Rate value x 2048Kbps. The rate value is 1~255.
When link speed is 10MB. The rate value is 1~4.
When link speed is 100MB. The rate value is 1~48.
Update
LoadDefault
If the link speed of selected port is lower than the rate that you seting, this system will use the value of link speed as your setting rate.
If the rate field is shown in red text, it means the link speed is lower than the using bandwidth.



Port No.	Tx Rate	Rx Rate	Link Speed	Port No.	Tx Rate	Rx Rate	S
1	Full Speed	Full Speed	---	14	Full Speed	Full Speed	
2	Full Speed	Full Speed	---	15	Full Speed	Full Speed	
3	Full Speed	Full Speed	---	16	Full Speed	Full Speed	1
4	Full Speed	Full Speed	---	17	Full Speed	Full Speed	
5	Full Speed	Full Speed	---	18	Full Speed	Full Speed	
6	Full Speed	Full Speed	---	19	Full Speed	Full Speed	
7	Full Speed	Full Speed	---	20	Full Speed	Full Speed	
8	Full Speed	Full Speed	---	21	Full Speed	Full Speed	
9	Full Speed	Full Speed	---	22	Full Speed	Full Speed	
10	Full Speed	Full Speed	---	23	Full Speed	Full Speed	
11	Full Speed	Full Speed	---	24	Full Speed	Full Speed	
12	Full Speed	Full Speed	---	25	Full Speed	Full Speed	
13	Full Speed	Full Speed	---	26	Full Speed	Full Speed	

1. Select the “Port No.”: you can choose port 1 to port 26.

2. “TX Rate Value”: set the transmission rate of the selected port. (0:Full speed; 1~255:Specified bandwidth.)

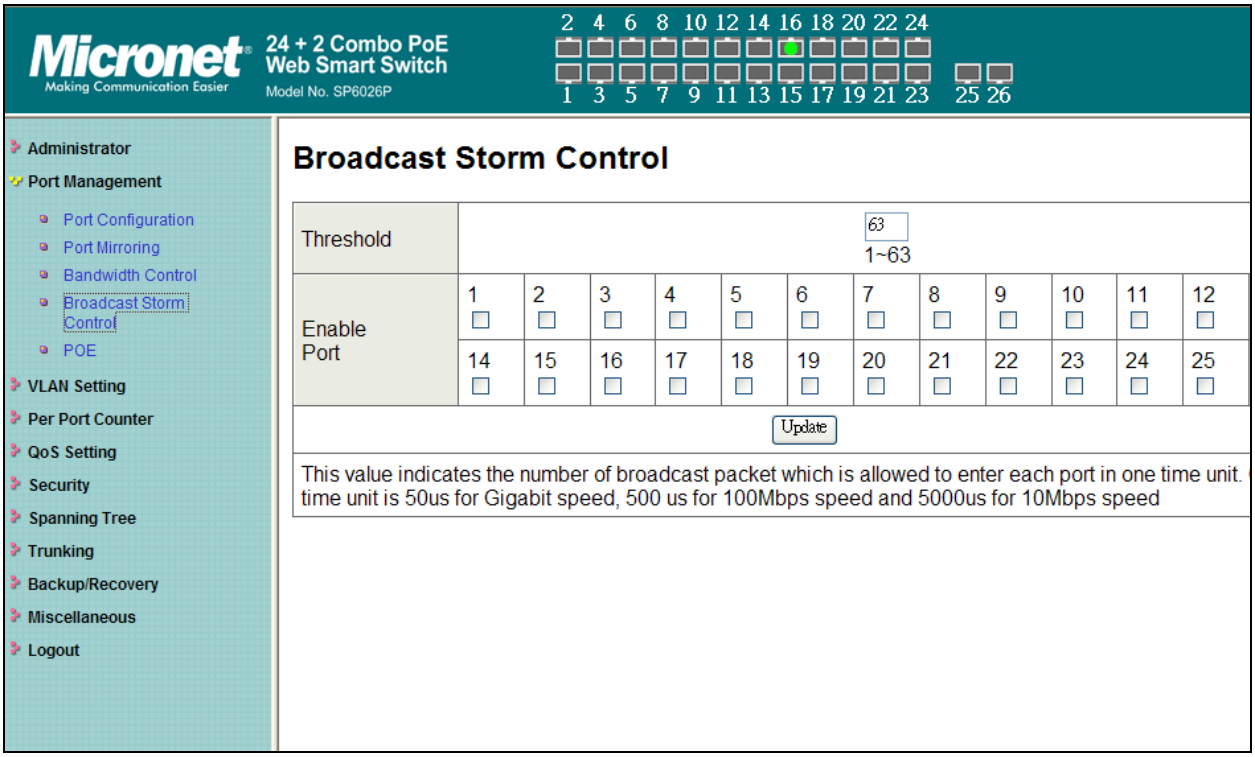
3. “RX Rate Value”: set the receiving rate of the selected port. (0: Full speed; 1~255: Specified bandwidth.)

4. “Resolution” : Low: 32 kbps / High: 556 kbps

5. Click “Update” to confirm the setting or “LoadDefault”.

Now, the setting of “Bandwidth Control” is finished.

Port Management: Broadcast Storm Control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Trunking
Backup/Recovery
Miscellaneous
Logout
Broadcast Storm Control
Threshold
63
1~63
Enable Port
1 2 3 4 5 6 7 8 9 10 11 12
14 15 16 17 18 19 20 21 22 23 24 25
Update
This value indicates the number of broadcast packet which is allowed to enter each port in one time unit.
time unit is 50us for Gigabit speed, 500 us for 100Mbps speed and 5000us for 10Mbps speed

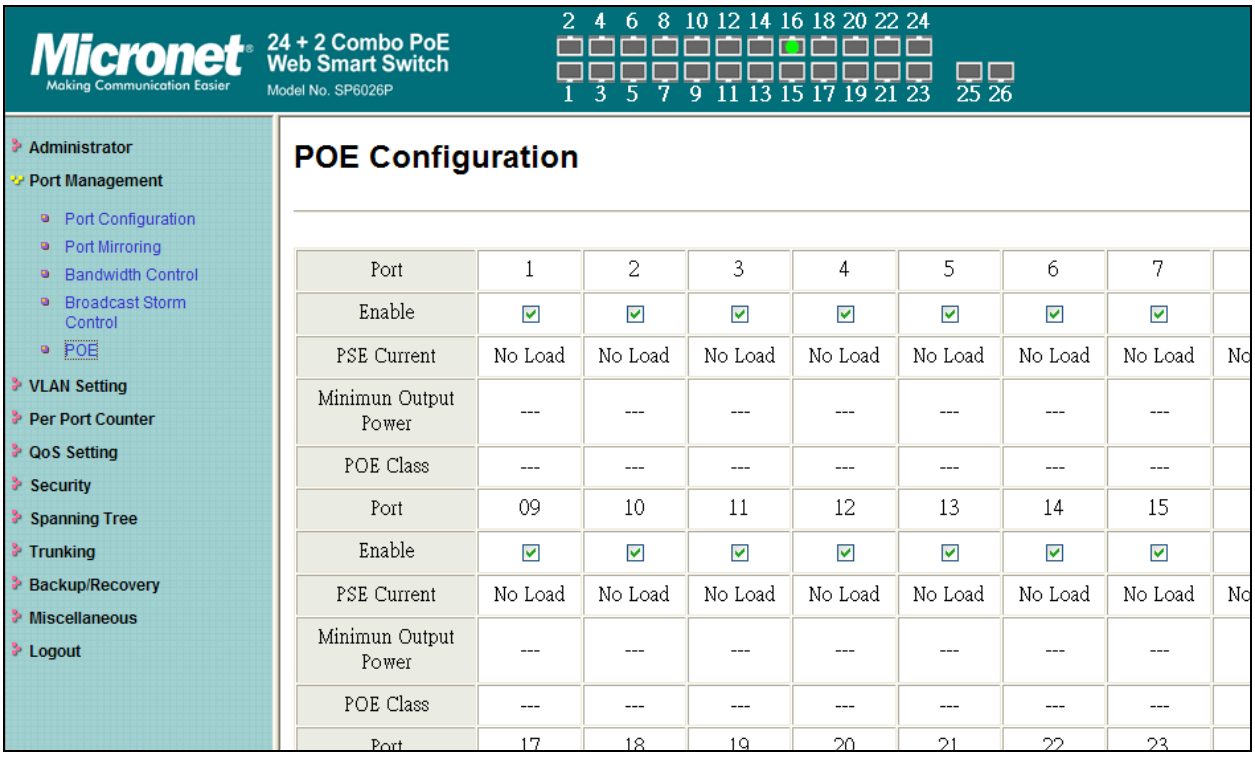
1. “Threshold” - Set the threshold from 1~63.

2. “Enable Port” - per port to define the status of broadcast packets.

3. Click “Update” to confirm the setting.

Now, the setting of “Broadcast Storm Control” is finished.

Port Management: PoE Configuration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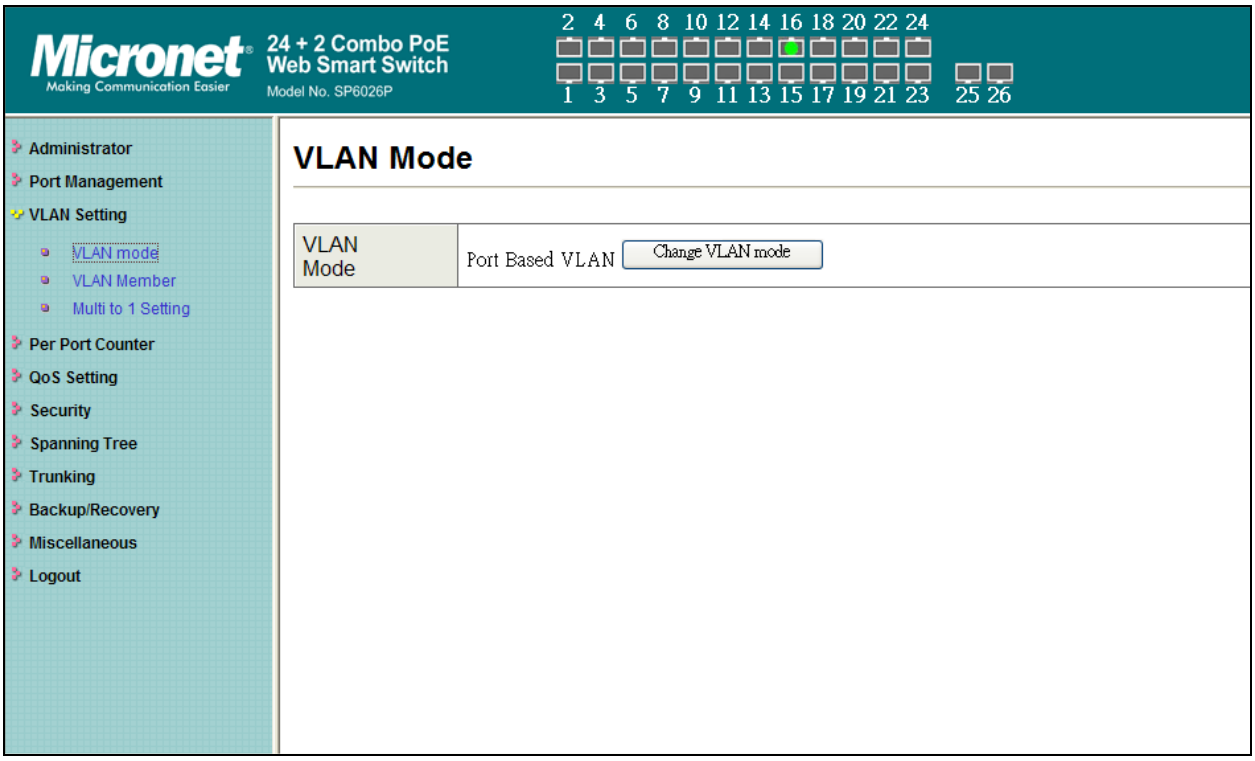
Broadcast Storm Control
POE
VLAN Setting
Per Port Counter
QoS Setting
Security
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
POE Configuration
Port 1 2 3 4 5 6 7
Enable
PSE Current No Load No Load No Load No Load No Load No Load No Load
Minimun Output Power --- --- --- --- --- --- ---
POE Class --- --- --- --- --- --- ---
Port 09 10 11 12 13 14 15
Enable
PSE Current No Load No Load No Load No Load No Load No Load No Load
Minimun Output Power --- --- --- --- --- --- ---
POE Class --- --- --- --- --- --- ---
Port 17 18 19 20 21 22 23

Remote access and monitor the attached PD (Powered Device) status by using Enable/Disable function.

1. **Enable:** POE of the port is able to supply power to the attached PD (Powered Device)
2. **PSE Current & Minimum Output Power:** The status of the port current and minimum output power.
3. **POE class**: each POE port will detect the class of the attached PD (Powered Device)
4. Click “Update” to confirm and finish the setting.

Now, the setting of “PoE Configuration” is finished.

VLAN Setting: VLAN Mode



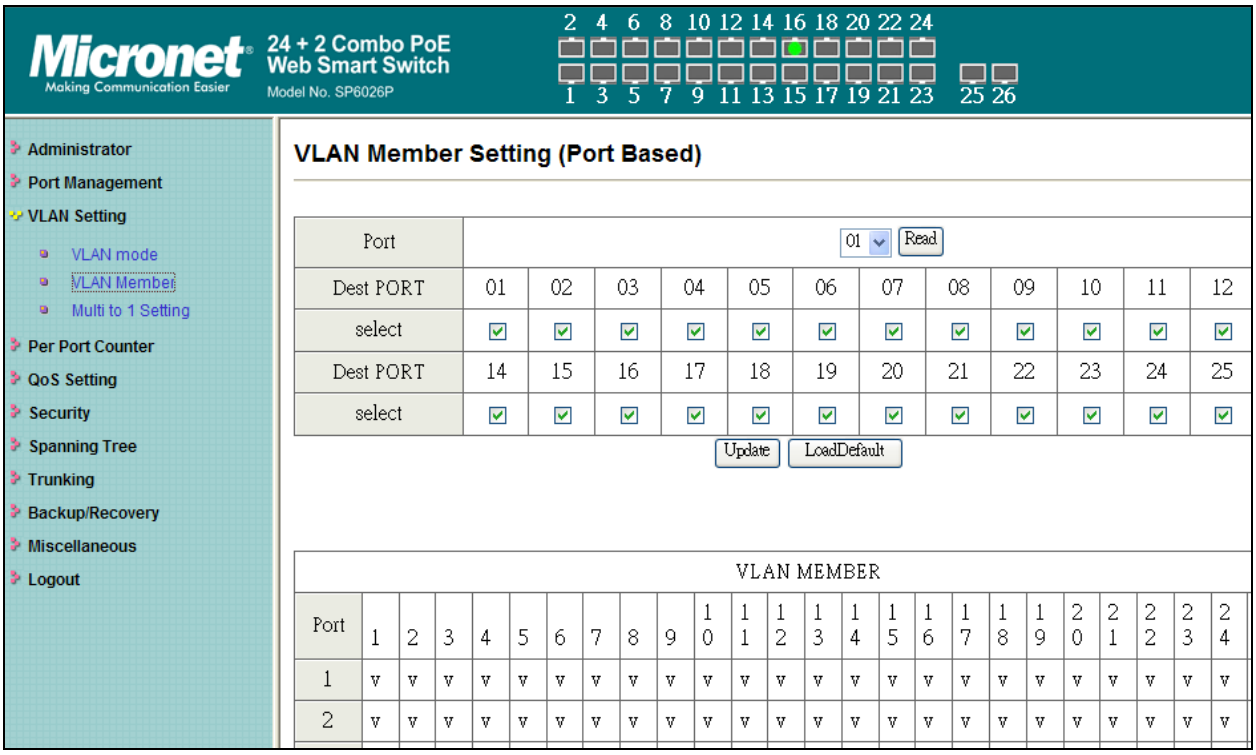
There are two VLAN modes: Port Based VLAN and Tag Based VLAN.

Click “Change VLAN mode” to select the mode.

**If the Port Based VLAN function is enabled, Tag Based VLAN and Multi to 1 setting function will be disabled automatically.

Now, the setting of “VLAN Mode” is finished.

VLAN Setting: VLAN Member Setting (Tag Based)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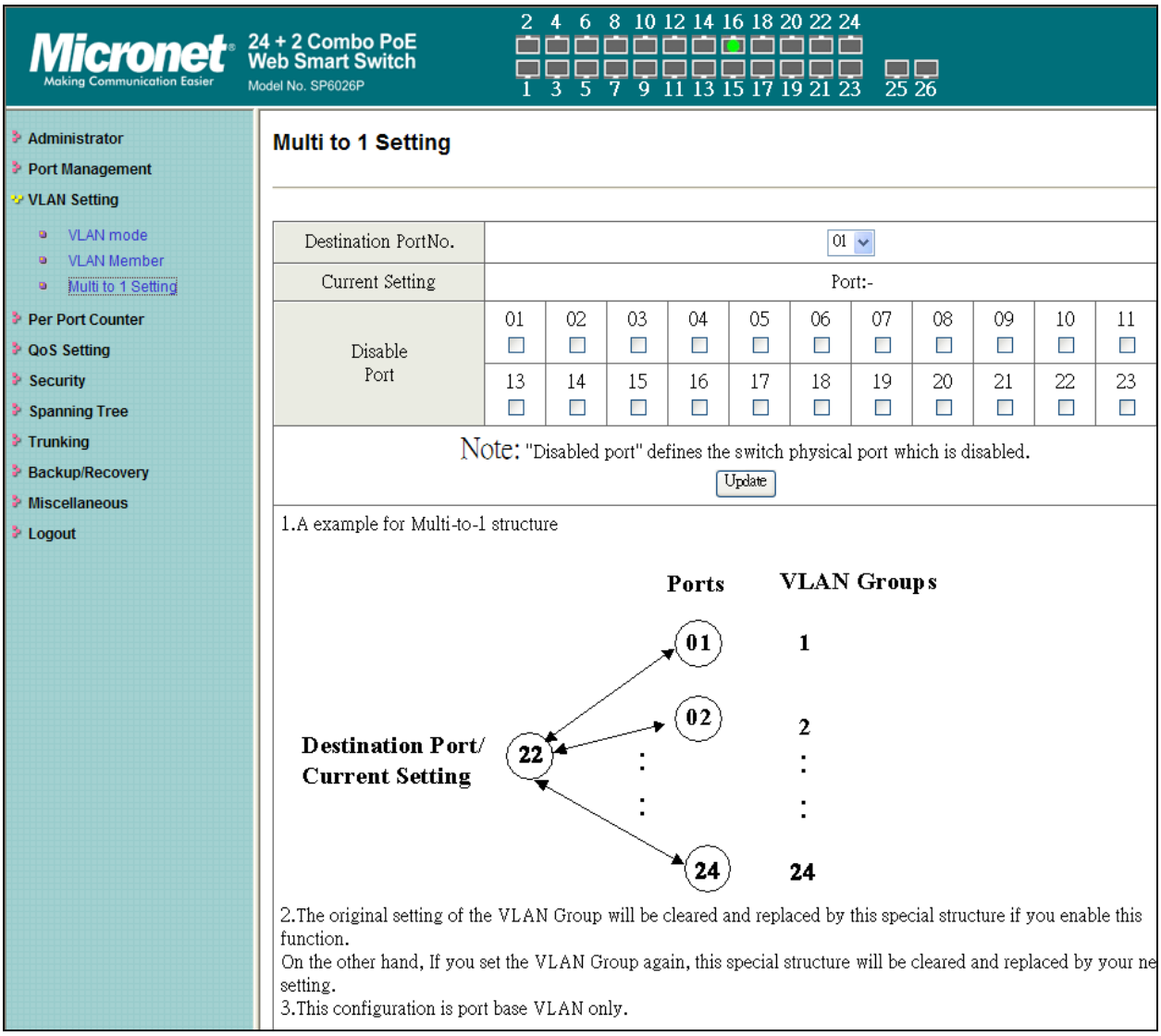
Administrator
Port Management
VLAN Setting
VLAN mode
VLAN Member
Multi to 1 Setting
Per Port Counter
QoS Setting
Security
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
VLAN Member Setting (Port Based)
Port
01
Read
Dest PORT 01 02 03 04 05 06 07 08 09 10 11 12
select
Dest PORT 14 15 16 17 18 19 20 21 22 23 24 25
select
Update
LoadDefault
VLAN MEMBER
Port 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
1 v v v v v v v v v v v v v v v v v v v v v v v v
2 v v v v v v v v v v v v v v v v v v v v v v v v

You can select a port group.

1. Click the port numbers: which you want to put them into the selected VLAN group.
2. Click “Update” to confirm and finish the setting.
3. Click “LoadDefualt” to back to the original factory setting.

Now, the setting of “VLAN Member” is finished.

VLAN Setting: Multi to 1 Setting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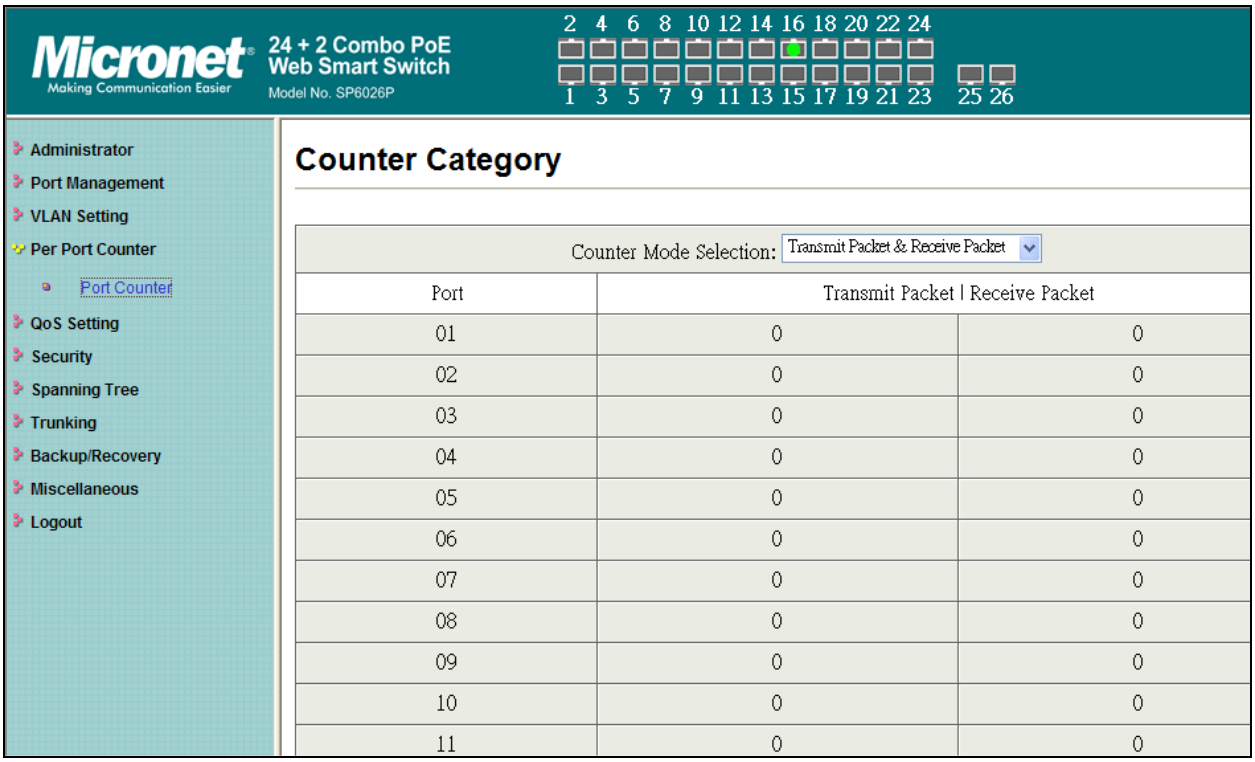
VLAN Setting
VLAN mode
VLAN Member
Multi to 1 Setting
Per Port Counter
QoS Setting
Security
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
Multi to 1 Setting
Destination PortNo.
01
Current Setting
Port:-
Disable Port
01 02 03 04 05 06 07 08 09 10 11
13 14 15 16 17 18 19 20 21 22 23
Note: "Disabled port" defines the switch physical port which is disabled.
Update
1.A example for Multi-to-1 structure
Ports
VLAN Groups
01
02
22
24
1
2
24
Destination Port/
Current Setting
2.The original setting of the VLAN Group will be cleared and replaced by this special structure if you enable this function.
On the other hand, If you set the VLAN Group again, this special structure will be cleared and replaced by your ne setting.
3.This configuration is port base VLAN only.

This is a special design for easily setting the switch VLAN into “VLAN per Port“.

1. Choose “Destination Port No”.
2. Choose “Disable Port”
3. “Disable Port” – choose the port which you don’t want to use
4. Click “Update” to confirm and finish the setting.

After this setting, all ports can only connect to destination ports.

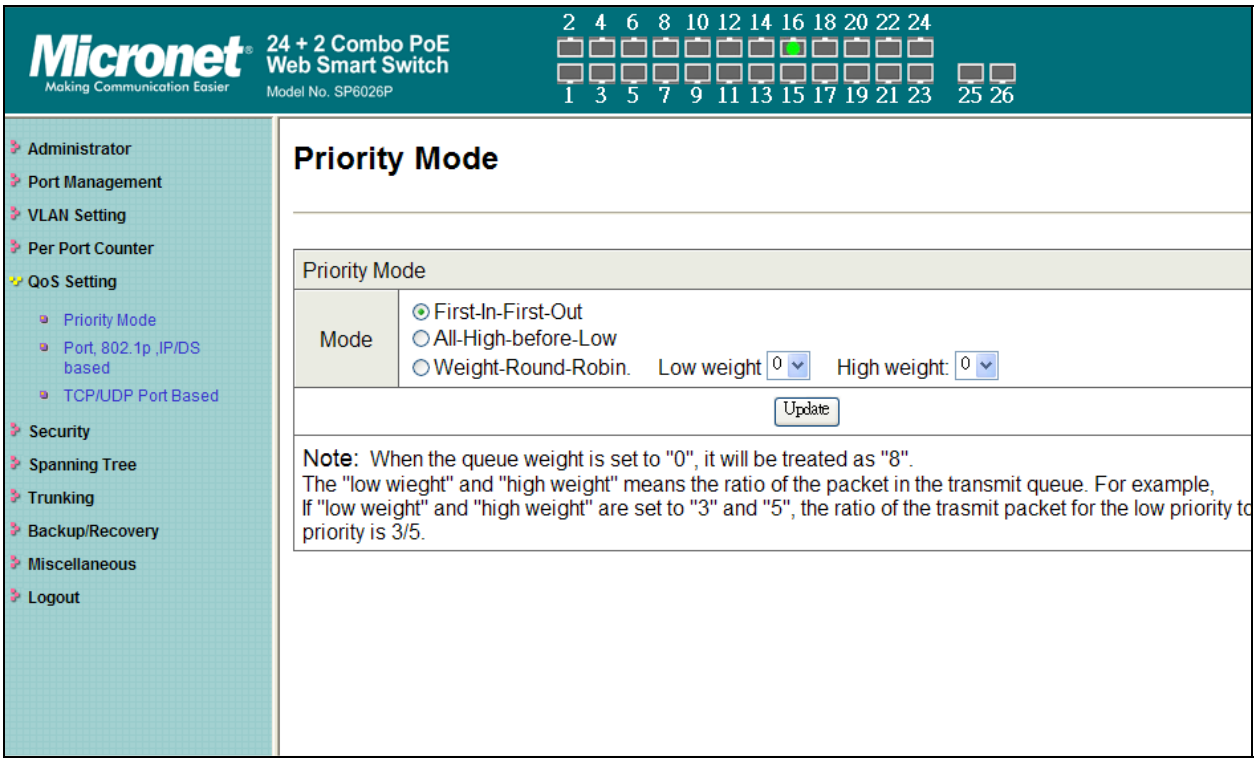
Per Port Counter: Counter Category



You can read the transmitting and receiving packet of the connecting port.

Click “Refresh” or “Clear” the data.

QoS Setting: Priority Mode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Per Port Counter
QoS Setting
Priority Mode
Port, 802.1p ,IP/DS based
TCP/UDP Port Based
Security
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
Priority Mode
Priority Mode
Mode
First-In-First-Out
All-High-before-Low
Weight-Round-Robin.
Low weight 0
High weight: 0
Update
Note: When the queue weight is set to "0", it will be treated as "8".
The "low wieght" and "high weight" means the ratio of the packet in the transmit queue. For example,
If "low weight" and "high weight" are set to "3" and "5", the ratio of the trasmit packet for the low priority to
priority is 3/5.

There are three Priority Modes to select.

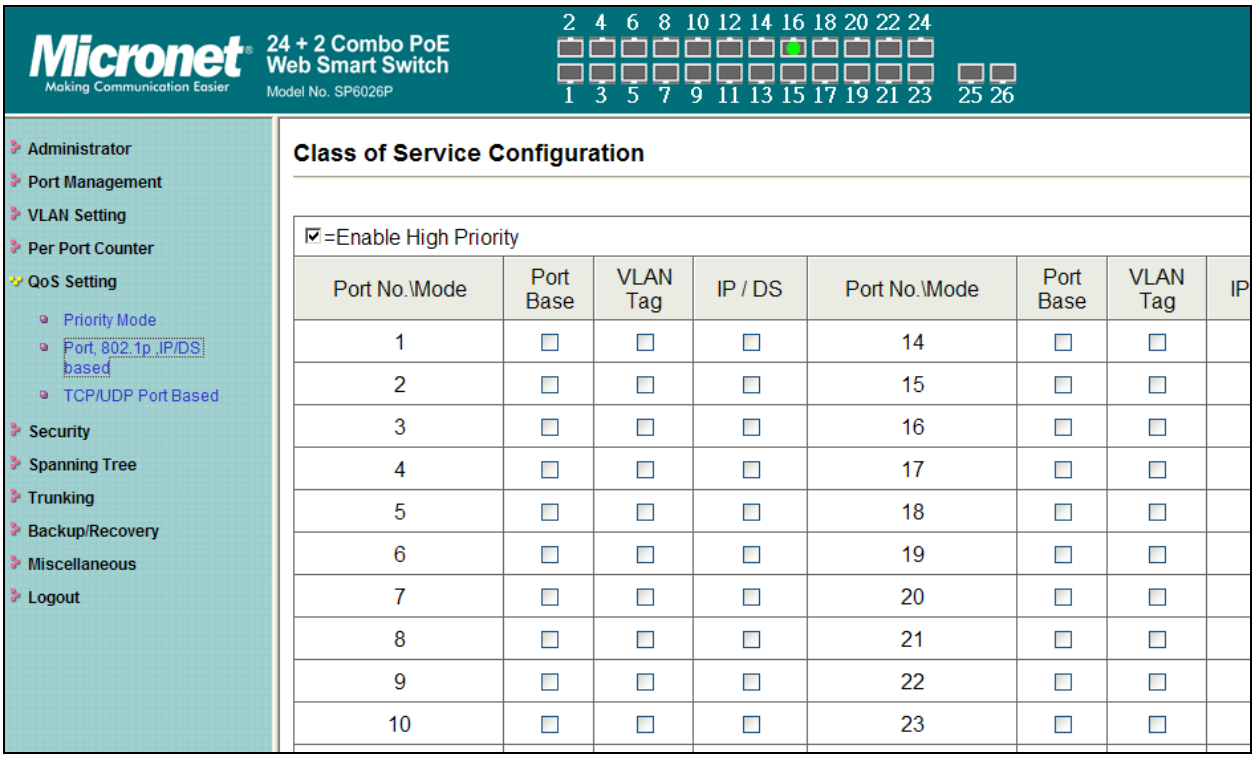
1. First-in-First-Out- the first receiving packet will be firstly transmitted.

2. All-High-before-Low – All packets will be assigned to either Q2 (high) piority queue or Q1 (low) priority queue.

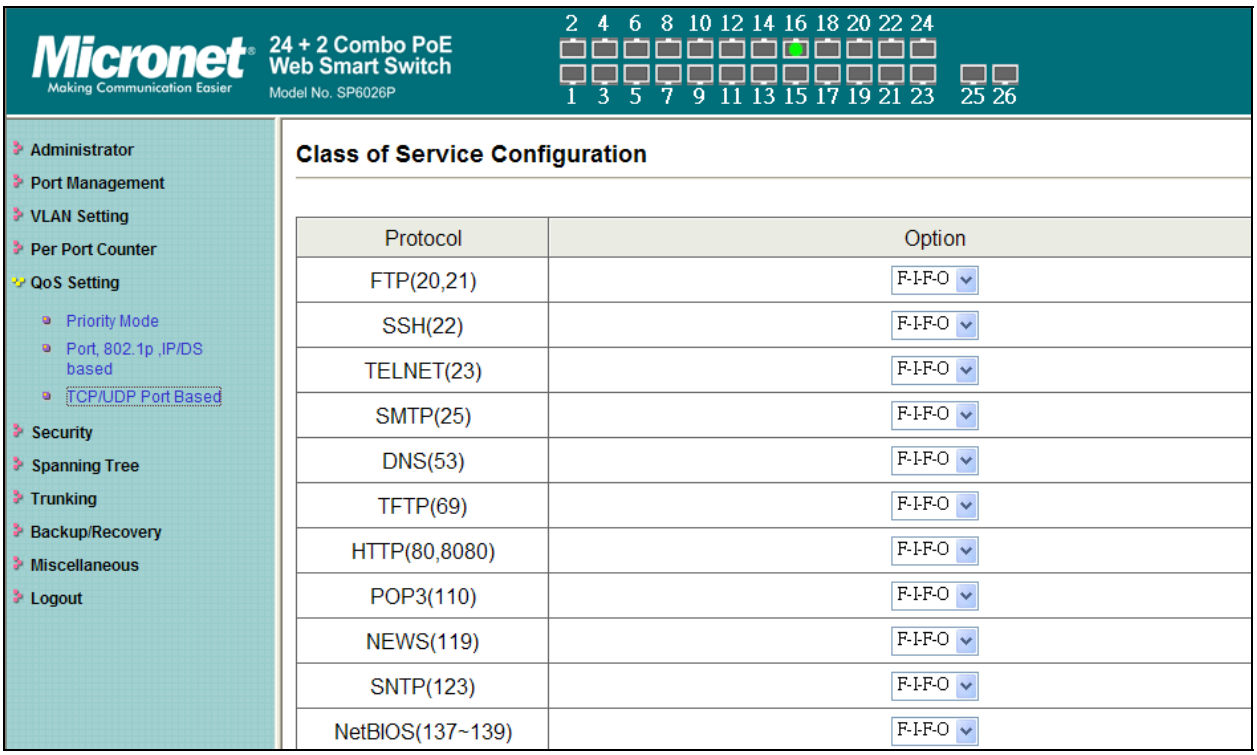
3. Weight-Round-Robin- set the ratio of the transmitting packet for the low priority to high priority.

4. Click “Update” to confirm and finish the setting.

QoS Setting: Class of Service



You can set QoS mode of per port by different bases.

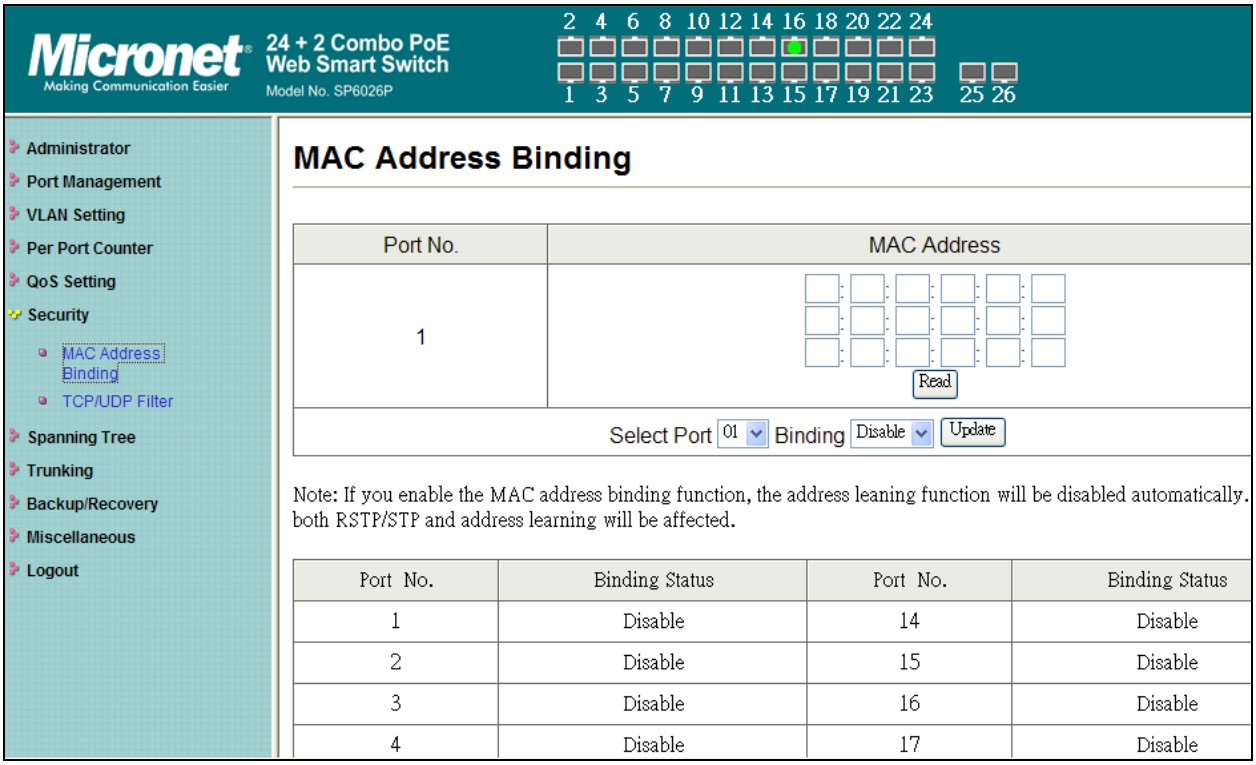


Base on different protocol, you can choose four different types of Class of Service for each TCP/UDP port number -First-in-First-out, Discard, High Priority or Law Priority to control the incoming packet.

Click “Update” to confirm and finish the setting.

Now, the setting of “Class of Service” is finished.

Security: MAC Address Filter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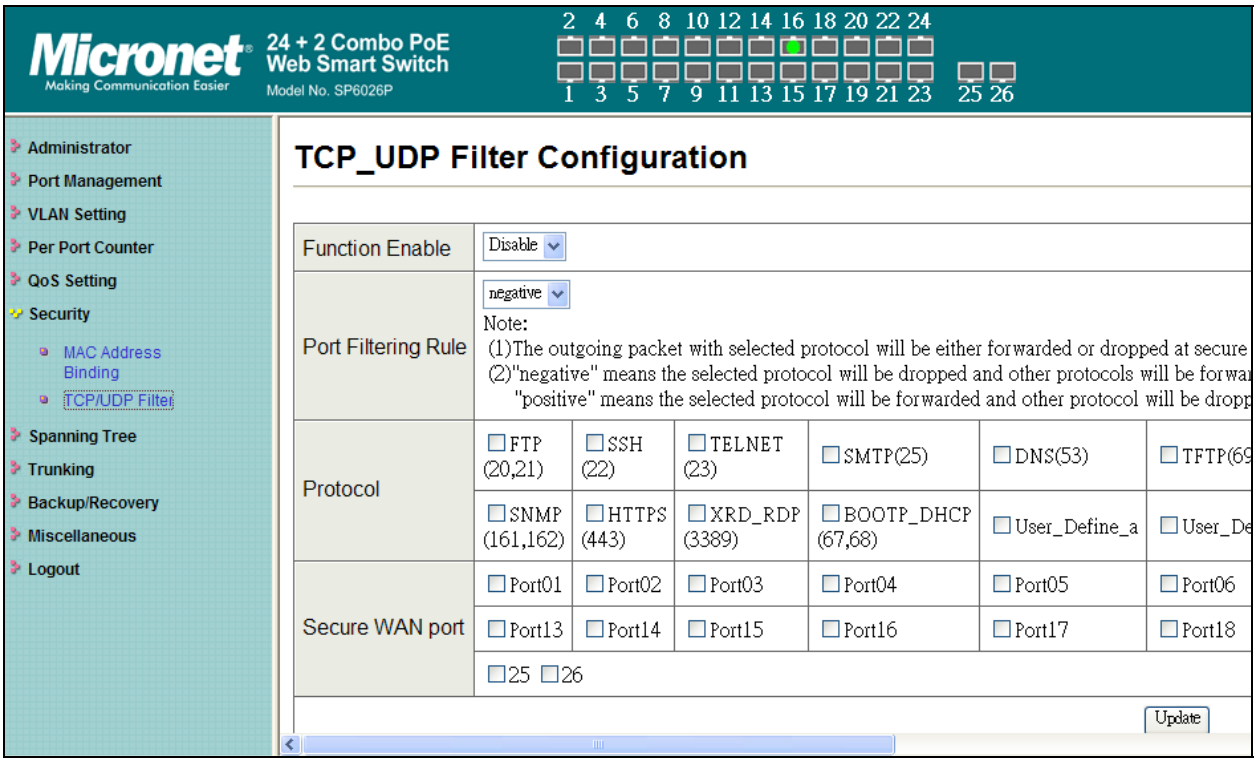
QoS Setting
Security
MAC Address Binding
TCP/UDP Filter
Spanning Tree
Trunking
Backup/Recovery
Miscellaneous
Logout
MAC Address Binding
Port No.
MAC Address
1
Read
Select Port 01 Binding Disable Update
Note: If you enable the MAC address binding function, the address leaning function will be disabled automatically. both RSTP/STP and address learning will be affected.
Port No. Binding Status Port No. Binding Status
1 Disable 14 Disable
2 Disable 15 Disable
3 Disable 16 Disable
4 Disable 17 Disable

Set special MAC address to activate on the selected port

1. Choose “Select Port” – port 1~26
2. Binding– Enable: allow the packet with the specified source MAC address to enter this port.
3. Click “Update” to confirm and finish the setting.

Now, the setting of “MAC Address Filter” is finished.

Security: TCP_UDP Filter Configuration



You can enable or disable this function of per port.

If the “Function Enable” is “Enable”, please kindly check the following setting:

1. “Port Filtering Rule” –

   Deny: the outgoing packets to the selected port with selected protocol will be dropped and other protocols will be forwarded.

   Allow: the selected protocol will be forwarded and other protocol will be dropped.

2. Protocol – choose protocols which you want.

3. Secure WAN Port– choose secure ports which you want.

   **Note 1:
   a. The secure WAN port should be set at the physical port which is connected to the server.
   b. Once this function is enabled, the switch will check the destination TCP/UTP port number at the outgoing direction of the secure WAN port.

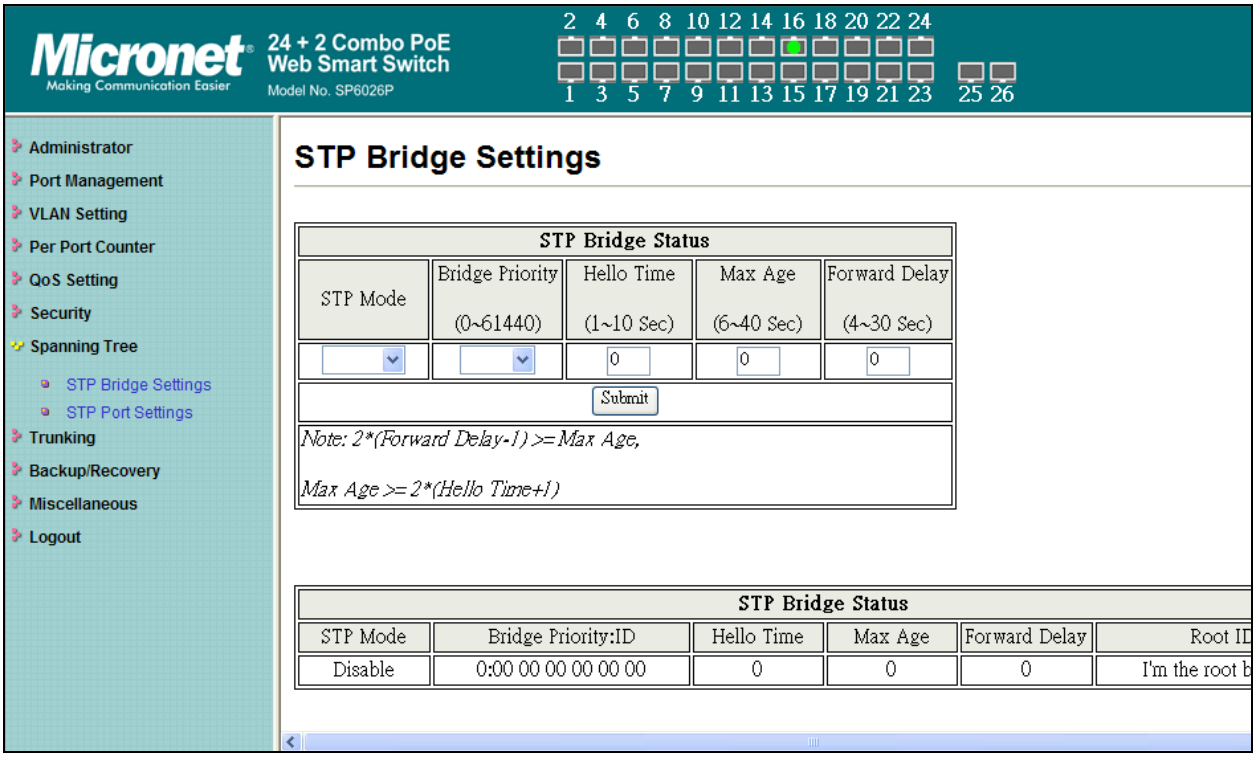
   If the condition matches, this packet will be dropped or forwarded.

**Note 2: The description of Secure WAN port is shown on the bottom of this screen.

4. Click “Update” to confirm and finish the setting.

Now, the setting of “TCP/UDP Filter Configuration” is finished.

Spanning Tree: STP Bridge Settings

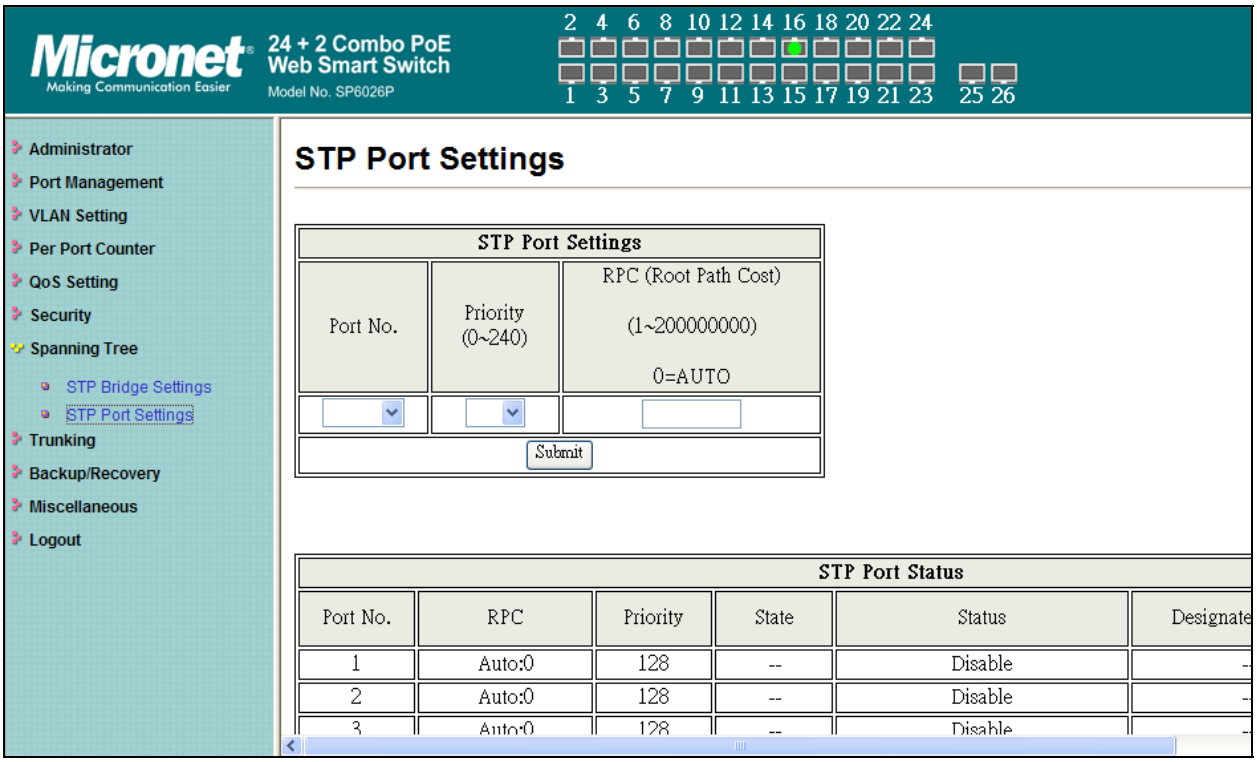


This setting is to avoid the loop network.

1. Select the “STP Mode”- choose “Disable”, “STP” or “RSTP”
2. Set the “Bridge Priority” – Set the priority of the Bridge
3. Set the period of “Hello Time” packet – Provides the time period between root bridge configuration messages.
4. Set the “Max Age” – Indicates when the current configuration message should be deleted.
5. Set the “Forward Delay” time – Provides the length of time that bridges should wait before transitioning to a new state after a topology change. (If a bridge transitions too soon, not all network links might be ready to change their state, and loops can result.)
6. Click “Submit” to confirm and finish the setting.

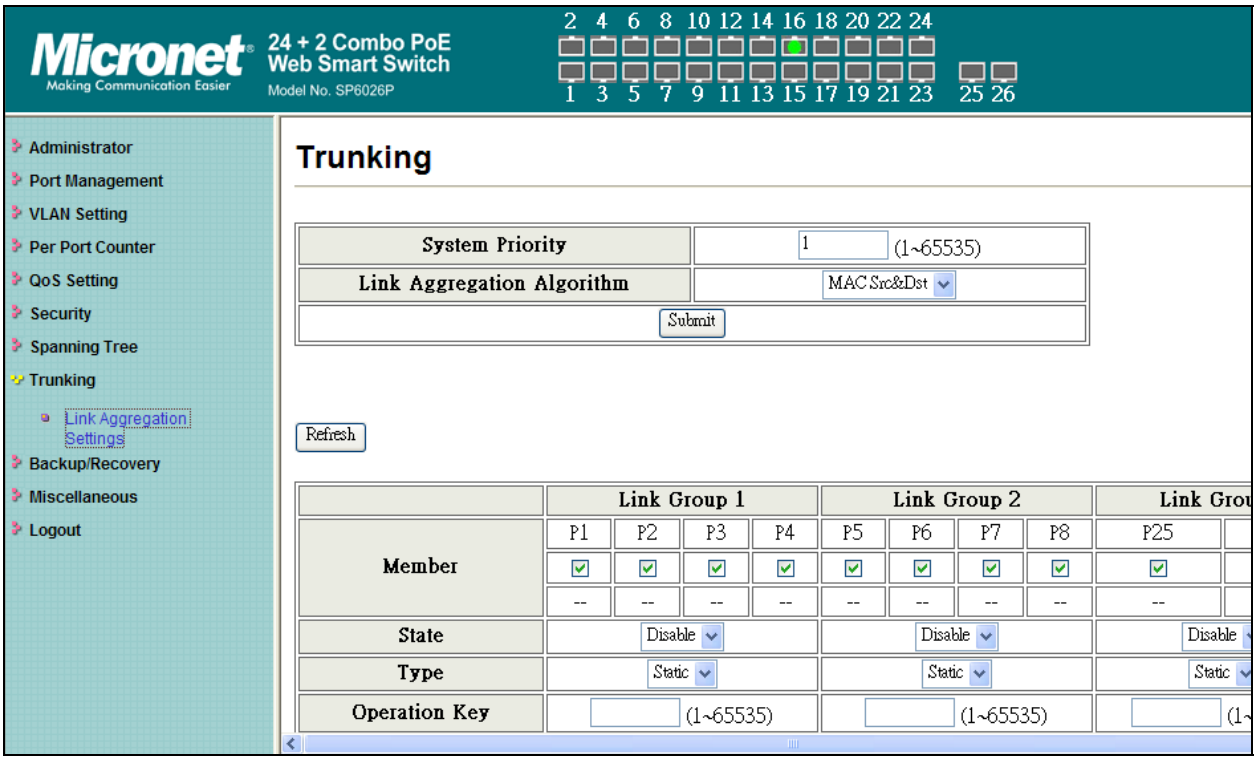
Now, the setting of “STP Bridge Settings” is finished.

Spanning Tree: STP Port Settings



1. Choose “Port No.” : Port 1 ~ Port 26
2. Choose “Priority”: 0~ 240
3. “RPC” = Root Path Cost: 0 = AUTO. When the loop is found, the STP/RSTP will calculate the cost of its path.

Trunk Setting: Trunk Configuration



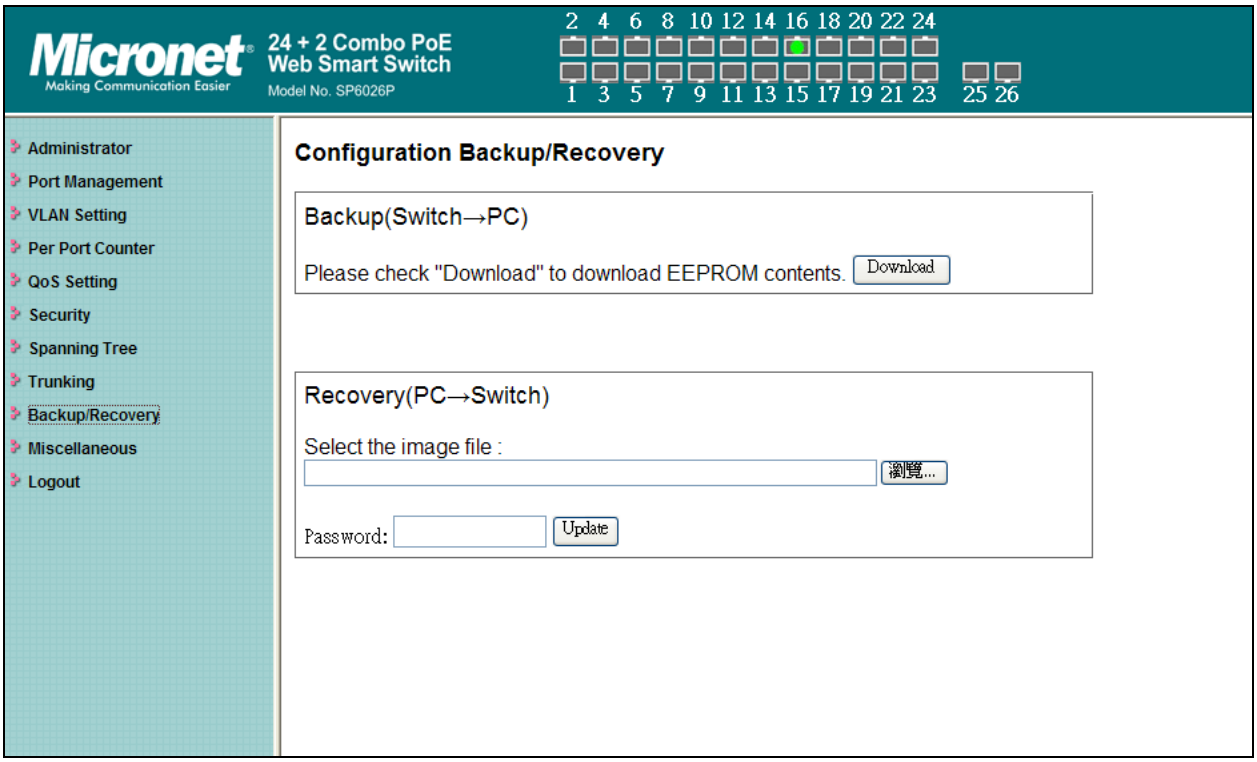
There are two groups to choose and each group is 4 ports and the third group is for 2 ports.

Click “Submit” to confirm and finish the setting.

“State” – Enable / Disable
“Type” – LACP/ Static
“Activity” – Active/Passive:

Both switches use “LACP” to configure the Trunk, at least one of them should be “Active”.

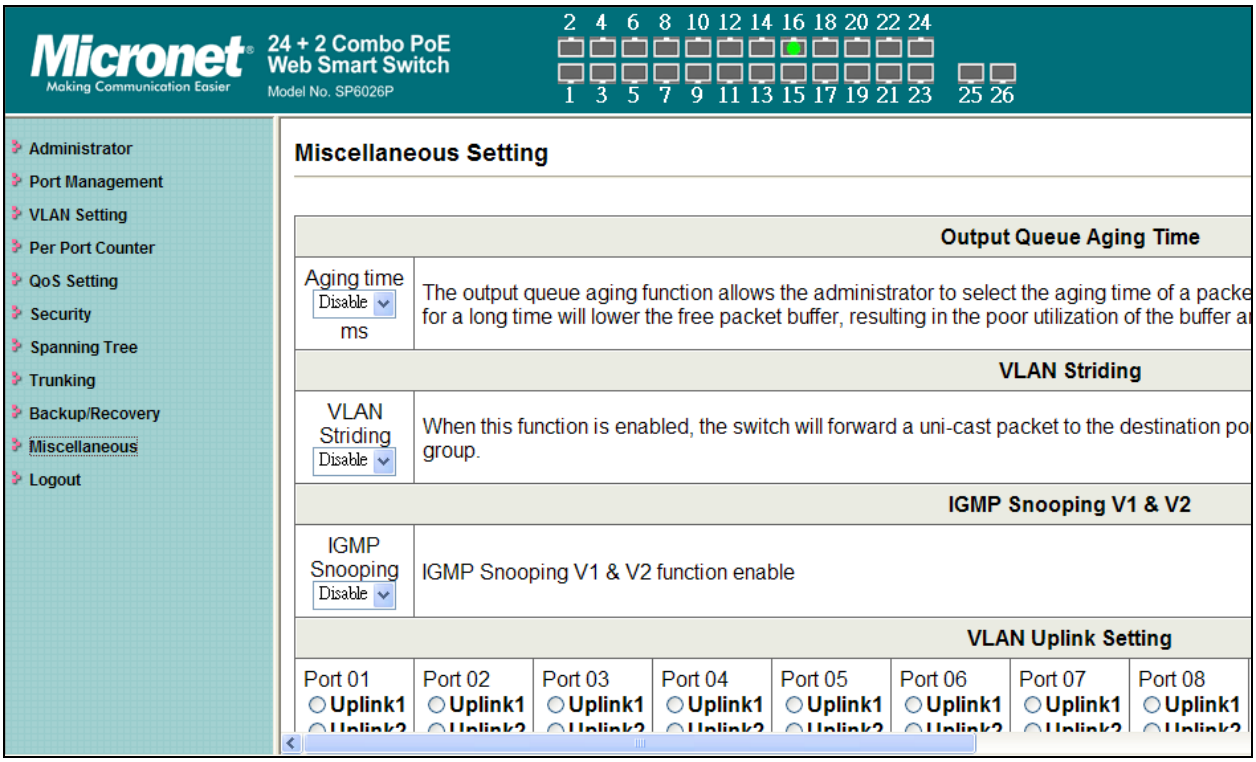
Configuration Backup/Recovery



Follow the instruction on the screen to update the original setting.

“Backup” - Click “Download” to confirm the setting.
“Recovery” – selects a file and key in the password → Click “Update” to confirm the setting.

Miscellaneous: Miscellaneous Setting



1. “Aging Time” - You can set queue aging time into different milliseconds or disable this function.

2. “VLAN Striding” – You can enable/disable this function.

3. “IGMP Snooping V1 & V2” – You can enable/disable this function.

4. “VLAN Uplink Setting” – Set “uplink1 or uplink2” or “Clear uplink1” or “Clear uplink2”

5. Click “Update” to confirm and finish the setting.

Logout: You can click “Logout” to logout.

Q & A

When you forgot your IP or password, please use the reset button for the factory default setting?

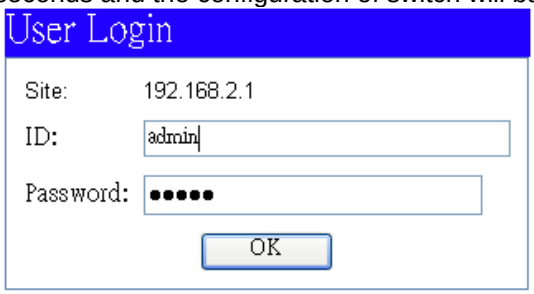
Please take the following steps to reset the Web Smart Switch back to the original default:

Step 1:
Turn on the Web Smart Switch

Step 2:
Press and hold the reset button continuously for 5 seconds and release the reset button.

Step 3:

The switch will reboot for 20 seconds and the configuration of switch will back to the default setting.



Key in the user ID and the password to pass the authentication; the user ID and the password are “admin”

IP: 192.168.2.1
ID: admin
Password: 1234